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Amended
11/10/01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

A.T.

Applicants: Walker, Michael R.; Taylor, Sean D.
Assignee: At Road, Inc.
Title: Enhanced In-Vehicle Wireless Communication System Handset Operation
Serial No.: 09/965,232 Filing Date: September 25, 2001
Examiner: Unknown Group Art Unit: Unknown
Docket No.: M-8870 US

San Jose, California
17 October 2001

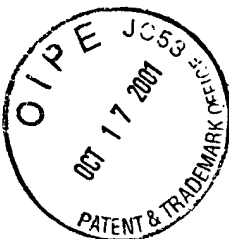
COMMISSIONER FOR PATENTS
Washington, D. C. 20231

PRELIMINARY AMENDMENT

Dear Sir:

Prior to examining this application, please replace the pending claims with the following claims:

1. An in-vehicle wireless communication system handset controller comprising:
- a central processing unit;
 - a memory containing first coded instructions enabling the central processing unit to control telephone number dialing by a wireless communication system handset coupled to the handset controller and to control receipt and sending of messages by the handset, and containing second coded instructions enabling the central processing unit to output a warning to a user if the handset is not coupled to the handset controller;
 - an input unit comprising data input keys larger than keys on a keypad of the handset;
 - and
 - an output unit comprising a display larger than a display of the handset, wherein displayed message text characters on the output unit display are larger than displayed message text characters on the handset display.



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2. The handset controller of claim 1 further comprising a global positioning system chipset coupled to the central processing unit.
3. The handset controller of claim 1, wherein at least a portion of the messages are short message service messages.
4. The handset controller of claim 1, wherein the warning is audible.
5. The handset controller of claim 1, wherein the warning is output if the handset is not coupled to the handset controller and an engine of the vehicle is started.
6. The handset controller of claim 1, wherein the warning is output if the handset is not coupled to the handset controller and the vehicle begins to move.
7. The handset controller of claim 1, wherein the data input keys are backlit.
8. The handset controller of claim 1, wherein the number of data input keys is larger than the number of keys on the handset keypad.
9. The handset controller of claim 1, wherein the display is backlit.
10. The handset controller of claim 1, wherein the display comprises a heads-up display positioned such that a driver of the vehicle sees a displayed image while looking through a windshield of the vehicle.
11. The handset controller of claim 1, wherein the controller is rigidly positioned in the interior of a motor vehicle to allow a driver of the vehicle, while seated in a driver's seat, to view messages on the display and to operate the data input keys.
12. The handset controller of claim 1 further comprising a voice command input unit coupled to allow the user to dial a telephone number to be accessed by the handset and to manage messages received by the handset.

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13. The handset controller of claim 1 further comprising a voice synthesizer unit coupled to audibly output a message received by the handset.

14. The handset controller of claim 1, wherein the controller is coupled to the handset via a wireless communication link.

15. The handset controller of claim 1, wherein the handset is a cellular telephone handset.

16. The handset controller of claim 1 further comprising a power supply coupled to charge a battery in the handset.

17. A method for controlling a wireless communication system handset, comprising the acts of:

using keys on an in-vehicle controller to control telephone number dialing by the handset and to control receipt and sending of messages by the handset, the keys on the controller being larger than keys on the handset;
displaying messages received by the handset such that displayed message text characters are larger than message text characters displayed by the handset; and
outputting a warning if the handset is not coupled to the controller.

18. The method of claim 17 further comprising outputting the warning if an engine of the vehicle is started.

19. The method of claim 17 further comprising outputting the warning if the vehicle begins to move.

20. The method of claim 17 further comprising backlighting keys on the controller.

21. The method of claim 17 further comprising backlighting a display outputting the larger message text characters.

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22. The method of claim 17 further comprising using a heads-up display to display the received messages.

23. The method of claim 17 further comprising the acts of:

using a first voice command to dial a telephone number to be accessed by the handset;
and
using a second voice command to manage messages received by the handset.

24. The method of claim 17 further comprising using a power supply in the controller to charge a battery in the handset.

25. The method of claim 17 further comprising the acts of:

using the handset controller to determine a geographic position of the vehicle; and
sending the determined position to a computer.

26. The method of claim 17 further comprising the acts of:

receiving a plurality of messages, wherein each unique received message is formatted
by a corresponding unique sender in one of a plurality of communication
protocols;
identifying the communication protocol and format of each received message; and
outputting each unique received message as formatted by each corresponding unique
sender.

27. The method of claim 17, wherein one of the received messages is a cargo pickup or delivery instruction to a driver of the vehicle.

28. An in-vehicle wireless communication system handset controller comprising:

a central processing unit;
a memory containing first coded instructions enabling the central processing unit to
control telephone number dialing by a wireless communication system handset
coupled to the handset controller and to control receipt and sending of messages by
the handset, and containing second coded instructions enabling the central

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processing unit to output a warning to a user if the handset is not coupled to the handset controller;
an input unit comprising data input keys larger than keys on a keypad of the handset;
and
an output unit comprising a display larger than a display of the handset, wherein the display is configured to output a number of displayed message text characters larger than a number of displayed message text characters output on the handset display.

29. The handset controller of claim 28 further comprising a global positioning system chipset coupled to the central processing unit.

30. The handset controller of claim 28, wherein at least a portion of the messages are short message service messages.

31. The handset controller of claim 28, wherein the warning is audible.

32. The handset controller of claim 28, wherein the warning is output if the handset is not coupled to the handset controller and an engine of the vehicle is started.

33. The handset controller of claim 28, wherein the warning is output if the handset is not coupled to the handset controller and the vehicle begins to move.

34. The handset controller of claim 28, wherein the data input keys are backlighted.

35. The handset controller of claim 28, wherein the number of data input keys is larger than the number of keys on the handset keypad.

36. The handset controller of claim 28, wherein the display is backlighted.

37. The handset controller of claim 28, wherein the display comprises a heads-up display positioned such that a driver of the vehicle sees a displayed image while looking through a windshield of the vehicle.

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38. The handset controller of claim 28, wherein the controller is rigidly positioned in the interior of a motor vehicle to allow a driver of the vehicle, while seated in a driver's seat, to view messages on the display and to operate the data input keys.
39. The handset controller of claim 28 further comprising a voice command input unit coupled to allow the user to dial a telephone number to be accessed by the handset and to manage messages received by the handset.
40. The handset controller of claim 28 further comprising a voice synthesizer unit coupled to audibly output a message received by the handset.
41. The handset controller of claim 28, wherein the controller is coupled to the handset via a wireless communication link.
42. The handset controller of claim 28, wherein the handset is a cellular telephone handset.
43. The handset controller of claim 28 further comprising a power supply coupled to charge a battery in the handset.
44. A method for controlling a wireless communication system handset, comprising the acts of:
- using keys on an in-vehicle controller to control telephone number dialing by the handset and to control receipt and sending of messages by the handset, the keys on the controller being larger than keys on the handset;
 - displaying messages received by the handset such that a number of displayed message text characters is larger than a number of displayed message text characters output on the handset display; and
 - outputting a warning if the handset is not coupled to the controller.
45. The method of claim 44 further comprising outputting the warning if an engine of the vehicle is started.

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46. The method of claim 44 further comprising outputting the warning if the vehicle begins to move.

47. The method of claim 44 further comprising backlighting keys on the controller.

48. The method of claim 44 further comprising backlighting a display outputting the larger message text characters.

49. The method of claim 44 further comprising using a heads-up display to display the received messages.

50. The method of claim 44 further comprising the acts of:

using a first voice command to dial a telephone number to be accessed by the handset;
and
using a second voice command to manage messages received by the handset.

51. The method of claim 44 further comprising using a power supply in the controller to charge a battery in the handset.

52. The method of claim 44 further comprising the acts of:

using the handset controller to determine a geographic position of the vehicle; and
sending the determined position to a computer.

53. The method of claim 44 further comprising the acts of:

receiving a plurality of messages, wherein each unique received message is formatted
by a corresponding unique sender in one of a plurality of communication
protocols;
identifying the communication protocol and format of each received message; and
outputting each unique received message as formatted by each corresponding unique
sender.

54. The method of claim 44, wherein one of the received messages is a cargo pickup or delivery instruction to a driver of the vehicle.

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Remarks

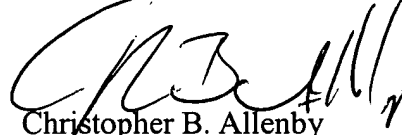
This amendment corrects a typographical error in claim 43. No new matter is added.

If the Examiner has any questions, Applicants invite the Examiner to contact the undersigned attorney at 408-453-9200.

EXPRESS MAIL LABEL NO:

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Respectfully submitted,



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43. The handset controller of claim 28 [22] further comprising a power supply coupled to charge a battery in the handset.

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